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**REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
GROUP 2834
PATENT APPLICATION**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q53565

Yoshihito ASAO

Appln. No.: 09/277,198

Group Art Unit: 2834

Confirmation No.: 3195

Examiner: K. Tamai

Filed: March 26, 1999

For: **STATOR FOR AN AUTOMOTIVE ALTERNATOR AND METHOD OF
MANUFACTURE THEREFOR**

#25 / Reg. for
Reconsider.
P. Evans
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REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116

ATTN: BOX AF

Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Office Action dated June 11, 2002, reconsideration and allowance of the subject application are respectfully requested. Upon entry of this request, claims 1-15 are the claims pending in the application, with claims 5-15 withdrawn from consideration as being directed to a non-elected invention. Applicant respectfully submits that the pending claims define patentable subject matter.

The Examiner has withdrawn the claim rejections based on the combinations of (a) Adachi, Kawai, Glennon and (b) Adachi, Fujiwara and Kawai. However, claims 1 and 4 are now rejected under 35 U.S.C. § 103(a) as being unpatentable over Adachi in view of King (USP 3,531,672). Further, claims 2 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Adachi in

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view of King and Schonfeldeer (USP 2,234,903). Applicant respectfully traverses the prior art rejections.

In the Amendment filed April 8, 2002, independent claim 1 was amended in order to more broadly claim that the “surfaces of the bridge portions are placed at least close to the axial end surfaces of said stator core in the direction of the central axis of said stator core” (rather requiring the “surfaces of the bridge portions are placed in contact with the axial end surfaces of said stator core without any gaps in the direction of the central axis of said stator core”). As discussed in the Amendment, Adachi, Kawai, Glennon and Fujiwara, alone or combined, do not teach or suggest how such a configuration as recited in claim 1 would be possible with preformed coils and a prefinished core.

Applicant respectfully submits that the King reference does not add significantly to the Examiner's position, particularly as regards independent claim 1. In particular, although the King reference may be somewhat relevant to the invention in that it discloses stator coils which are intended to lie close the stator core in the assembled state, the King reference is not relevant to a preformed stator coil, particularly a preformed coil where the coil ends are placed close to or contact the stator core without substantial gaps.

The Examiner relies upon King for its teaching of bridge portions or reaches extending in planes disposed closely adjacent to the opposite axial ends of the stator core or ring, as best shown in Figure 2 of the reference. In this particular stator, stator winding 22, 24 and 26 include a series of axially extending runs 22a, 24a and 26a disposed in every third slot in the stator core 18 and a series of circumferentially extending bridge portions 22b, 24b and 26b joining the ends

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of the runs 22a, 24a and 26a. The runs of a winding occupy slots different from the slots occupied by the runs of other windings (i.e., only one run per slot) and are positioned relative to one another so that no more than two bridge portions from different windings are juxtapositioned at any point about the axial end of the stator core. As a result, relatively small axial dimensions are possible in the final stator winding and more efficient heat dissipation is achieved.

Although the King reference (similar to the previously cited Fujiwara reference) may be somewhat more relevant than the Glennon patent for the “contact” or “close to” feature, it still does not address the ability to form such a construction using preformed coils and a prefinished core. Indeed, similar to the Fujiwara reference, the King reference appears to teach nothing at all regarding the use of either preformed coils or a prefinished core. This is important in the present context because, prior to the present invention, preformed stator coils could not be assembled to stator cores without significant gaps therebetween, without damage to the coils. See page 5, lines 11-33 of Applicant’s specification.

The Examiner (page 4 of the Office Action) asserts that the “arguments regarding a pre-formed coil is not persuasive because it is method of making limitation which is not germane to the patentability of the apparatus.” However, Applicant respectfully submits that the Examiner’s position is incorrect. First, the term “preformed” is not used in the “method” sense in the claims. Rather, the term defines the type of stator coils to which the invention is directed, and thus defines the apparatus. Second, one of ordinary skill in the art would not have been motivated to modify Adachi based on the teachings of King to produce the claimed invention since there is no

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teaching whatever that King's coils are preformed. Thus, to this extent, King teaches away from Adachi.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, there must be some suggestion or motivation to modify to combine the reference teachings. "To support the conclusion that the claimed invention is directed to obvious subject matter, either references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the reference." *Ex parte Clapp* 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). However, in the present case the Examiner has not provided any objective reasoning why one of ordinary skill in the art would have been motivated to modify Adachi in view of King. Moreover, the Examiner does not address how one of ordinary skill in the art would have been able to modify Adachi in view of King to produce the claimed invention since, prior to the present invention, preformed stator coils could not be assembled to stator cores without significant gaps therebetween, without damage to the coils.

Thus, absent any evidence at all that the Examiner's combination of references could overcome, or even address this issue, there is no motivation to combine the two teachings, and, indeed, no indication whatever that the two references could be successfully combined, even if one were to attempt to do so. A proper §103 rejection requires both of these indicators, i.e., motivation to combine and a reasonable expectation of success. For this reason, Applicant respectfully submits that the §103 rejection clearly fails.

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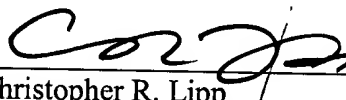
While the Schonfelder patent is again cited to show stator teeth having a longitudinal split, somewhat similar to the splits 91k according to the invention, the splits shown in Schonfelder's stator teeth are provided for a completely different functional reason, and the teeth are not altered from the prefinished state to the finished state. That is, Schonfelder splits the teeth in order to create a damping effect which tends to reduce resonant vibration of the teeth during generator operation. Accordingly, Applicant respectfully submits that dependent claim 2 should be allowable over the combined references.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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Attorney Docket No.: Q53565